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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/725,285	12/02/2003	Tsuyoshi Watanabe	65933-054	1820

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McDERMOTT, WILL & EMERY
600 13th Street, N.W.
Washington, DC 20005-3096

EXAMINER

TSUI, DANIEL

ART UNIT	PAPER NUMBER
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2185

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/28/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/725,285

Applicant(s)

WATANABE ET AL.

Examiner

Daniel Tsui

Art Unit

2185

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) 13 and 14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 12/2/03 and 10/5/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-12, drawn to the method and apparatus for addressing and writing coded data into a memory, classified in class 711, subclass 1.
 - II. Claims 13-14, drawn to a digital camera that includes writing and addressing coded data into a memory, classified in class 348, subclass 207.1.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct if they do not overlap in scope and are not obvious variants, and if it is shown that at least one subcombination is separately usable. In the instant case, subcombination I has separate utility since it can be used in any application that requires parallel coding and writing such as audio processing. See MPEP § 806.05(d).

The examiner has required restriction between subcombinations usable together. Where applicant elects a subcombination and claims thereto are subsequently found allowable, any claim(s) depending from or otherwise requiring all the limitations of the allowable subcombination will be examined for patentability in accordance with 37 CFR 1.104. See MPEP § 821.04(a). Applicant is advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the present application, such claim may be subject to

Art Unit: 2185

provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application.

3. During a telephone conversation with Brian Seidlick on December 8, 2006 a provisional election was made with traverse to prosecute the invention of claim 1-12. Affirmation of this election must be made by applicant in replying to this Office action. Claims 13 and 14 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Priority

4. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

5. The information disclosure statements (IDS) submitted on December 12, 2003 and October 5, 2005 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements are being considered by the examiner.

Oath/Declaration

6. The declaration filed on December 2, 2003 has been considered and accepted by the examiner.

Drawings

7. The drawings filed on December 2, 2003 have been considered and accepted by the examiner.

Specification

8. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

9. The abstract has been considered and accepted by the examiner.

10. The disclosure is objected to because of the following informalities:

Page 1, line 26 to page 2, line 1 recite "the *highly-efficiency* technologies..." This is idiomatically incorrect.

Page 2, line 2 recites "...need to be *devised* drastically..." This is idiomatically incorrect.

The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 112

11. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

12. Claims 8 and 11 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the encoder calculating the amount of coded data, does not reasonably provide enablement for the address specifying unit to calculate the amount of coded data. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims.

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakahashi (US 5,319,457) in view of Imaizumi (US 6,816,618).

As per claim 1, Nakahashi teaches a method including:

specifying the size of processed data deriving from each data block when a predetermined processing (encoding) is performed, in parallel (see figure 1; and column 2, lines 48-49; the amount of coded data is calculated), on a plurality of data blocks (see column 3, lines 64-66; and column 4, lines 3-10).

The reference does not teach specifying a write-start address for the plurality of data blocks by calculating addresses based on the size specified by said specifying the size, wherein the write-start address is used when the processed data deriving from

Art Unit: 2185

each data block is written to a memory. Imaizumi teaches a variable length image coding apparatus that specifies a write-start address dependent upon a size of data to write data to a memory (see column 25, lines 39-44; the area to which the image can be consecutively written is an attribute of the data's size). Therefore it would have been obvious at the time the invention was made for a person of ordinary skill in the art to include a step of specifying a write start-address for the plurality of data blocks by calculating addresses based on the specified size so that the system will know where to start writing the data to the memory and ensure that the memory has enough space for the data to be written to.

As per claim 4, Imaizumi teaches the address specifying to be used for determining an address where all the data can be written consecutively into the memory (see column 25, lines 40-41). Therefore it would have been obvious for the specifying a write-start address to be such that the processed data deriving from the plurality of data blocks are stored in a continuous manner at the time when the writing the processed data has been completed. This would ensure that all the processed data can be located easily since they would all be stored near the same location.

As per claim 5, the combination of Nakahashi and Imaizumi teach the address specifying unit as applied in the rejection to claim 1 above. Nakahashi also teaches a write control unit which writes, in parallel, to the memory (coder buffer memory 115, see figure 1) the processed data deriving from the plurality of data blocks (multiplexer 114, see column 2, lines 49-52).

As per claim 10, Nakahashi teaches a coding apparatus that has a plurality of encoders which perform, in parallel, variable-length coding on a plurality of data blocks (see figure 1; and column 1, lines 44-47). The combination of Nakahashi and Imaizumi teach an address specifying unit as applied in the rejection to claim 1 above. The combination also teaches a write control unit as applied in the rejection to claim 5 above.

As per claims 2, 3, 6, and 7, Nakahashi teaches the predetermined processing to be variable-length coding (see column 1, lines 45-46).

As per claims 8 and 11, Imaizumi teaches an address specifying unit calculating the amount of coded data deriving from each block (see column 25, lines 36-37).

As per claims 9 and 12, as applied in the rejection to claim 4 above, the combination of references teaches the write control unit realizing a state in which the processed data deriving from the plurality of data blocks are stored in the memory in a continuous manner at the time when writing the processed data has been completed.

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Murakami (US 5,155,852) teaches a digital information coding system which evenly distributes valid input data to digital signal processors operating in parallel.

Nelson (US 5,686,915) teaches interleaved Huffman encoding and decoding.

Feig (US 5,177,796) teaches image data processing of correlated images.

Art Unit: 2185

Nakano (US 5,568,278) teaches an image data coding and decoding method and apparatus with a plurality of DCT's, quantizers, and VLC's.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel Tsui whose telephone number is (571)270-1022. The examiner can normally be reached on M through F, 8:00-4:30 (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sanjiv Shah can be reached on (571)272-4098. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

007

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